

**Abstract**

It has now been found that in some transmitter implementations which transmit multiple code channels, for example CDMA transmitters, the observed power for each code channel at the output relative to the other code channels is dependent upon the total transmit power due to non-linearities in the transmitter. Methods and apparatus are provided which use pre-set digital gains or digital gain adjustments to compensate for the non-linearities as a function of total transmit power such that at the output, the desired relative powers are observed.